## General Monitoring Information

Park Place Timber Sale Example

- ◆ Project goals generally what do we intend to accomplish?
  - Reduce risk of high-severity fire (increase likelihood of residual tree survival when fire does burn)
  - Increase forest resistance to insect and disease outbreak
  - Limit weed infestations to endemic levels
  - Improve habitat for big game and cavity nesters
  - Maintain aesthetic beauty as seen from the county road
  - Minimize increased erosion resulting from management activities
- Project objectives what are specific, measurable actions that will be taken to achieve project goals?
  - Thin forest from an average of  $120 \text{ ft}^2/\text{ac}$  down to an average  $46 \text{ ft}^2/\text{ac}$
  - ▶ Thin forest to shift species composition from 85%, 10%, and 5% ponderosa pine, Douglas-fir, and lodgepole pine to 75%, 20%, and 0%
  - Construct erosion control devices (i.e., water bars & rolling dips) and grass seed as necessary (to standards based on slope and disturbance)
  - Spray to reduce weed populations where they are observed to exceed endemic levels

## Types of Monitoring

- ◆ Implementation monitoring have we done what we said we were going to do (is the contractor fulfilling the obligations of the contract)?
  - ▶ Basal area reduced to 46 ft²/ac?
  - Species composition shifted as desired?
  - ▶ Damage to leave trees minimized?
  - Development of skid trails minimized?
  - ▶ Slash piles constructed properly?
  - Water bars constructed at appropriate spacing on slopes of specified grade?
  - Is someone spraying weeds?
- Effectiveness monitoring are we achieving project goals?
  - Are species regenerating adequately to manage for target species composition?
  - Does the literature still support favoring large trees and favoring ponderosa pine > Douglas-fir > lodgepole pine to increase forest survivability when fire occurs?
  - ▶ Does the literature still support these treatments to reduce risk of insect and disease outbreak?
  - Are weed populations limited to endemic levels?
  - How does the local community feel about the project several years after completion?